replace by

--FIELD OF THE INVENTION--;

between lines 3 & 4: add --BACKGROUND AND PRIOR ART--;

line 11: change "opposed" to – opposite --; delete "the";

line 13: delete "the";

lines 13-14: delete "oligonucleotide amounts of";

line 14: after "kilograms" add -- amounts of oligonucleotides --;

after "makes" add -- it --;

line 15: delete "the"; and

line 16: delete "oligomer".

Page 2, lines 1-2: delete in their entirety.

Add the following:

--BRIEF DESCRIPTION OF THE FIGURES

Fig. 1: Reaction chamber for the oligonucleotide synthesis on a polypropylene sheet, the apparatus being adjusted such that it permits 90° rotation of the polypropylene sheet between the synthesis steps.

Fig. 2: Attachment of a sample and removal by ammonia (NH_4OH), used for the standard synthesis of free oligonucleotides (a) and for the production of oligonucleotide arrays (b); X = O; X = NH.

Fig. 3: Removal of the solid phase-bonded oligonucleotides from the surface. Application of the "NPE/NPEOC strategy" permits the alternative use of the oligomer chips for

either hybridization experiments (option I) or as a source for the isolation of individual primer molecules (option II).

Fig. 4: Activation of the mehtylamino-modified polypropylene sheet and linkage and coupling of the suitable protected nucleosides.

Fig. 5: Exemplary hybridizations with oligomer arrays on polypropylene membranes (a), (b): 4 different starting nucleosides, dC^{NPEOC} (columns 3,7), dA^{NPEOC} (columns 2, 6), dc^{bz} (column 1) and dc^{fl} (columns, 4, 8) were applied to a polypropylene sheet using an 8-channel synthesis apparatus. The sheet was then removed from the reaction chamber and turned by 90°. 7 different oligonucleotides were then synthesized (A-H), which produce 49 sites having 28 different sequences. A channel was left empty in both dimensions as control (lanes 5 and D). After the oligomer deprotection some sites (e.g. B2,6,8; C8; E8) were excised for the purpose of analysis. The remaining sheet was hybridized with a (a) 9-mer d(CTATAGTGA) AND (b) a 12-mer $d(GA_{11})$. Complementary sequences are underlined. In (c) and (d) the sheet was turned by 90° between the synthesis steps. Nonamers were hybridized whose sequences cover breaking points of the synthesis.

Fig. 6: PCR amplification of a plasmid insert. Both commercial primers were used for the reaction, plotted in lane 1. In lanes B and C each primer was replaced by oligonucleotides which were isolated from a 0.16 cm^2 piece of the polypropylene sheet treated according to the invention. Marker (lane D) is HindIII-digested λ-DNA and plasmid pUC18 DNA excised with FspI.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS--;

line 18: change "hybridizations" to -- hybridization --; and

line 26: change "dioxan" to -- dioxene --.

Page 3, line 3: change "Ill. 1" to -- figure 1 --;

line 7: after "(1986)." add ;-- Note that "NPEOC" is 2 - (4-nitrophenyl) ethoxycarbonyl and "NPE" is 2-nitrophenyl.--; and

line 23: after "chamber" add --and--;

Page 4, line 1: change "Tabelle" to -- Table --.

Page 5, line 7 to page 6, line 22: delete in their entirety, in view of the placement of this information at page 2.

Page 6, line 30: delete "an".

Page 7, line 2: change "dioxan" to -- dioxane --;

line 6: after "2h" add -- , --.

Page 8, line 18: change "Ill.5" to -- Figure 5 -- ; change "Ills" to -- Figures --.

IN THE CLAIMS

Cancel claim 6 without prejudice. Amend claims 1+3-5, and add claims 7-9 as follow:

Claim 1 (amended) A process for the parallel synthesis of oligonucleotides on an alkylamino modified matrix surface, [characterized] comprising attaching [in that] a 30'-succinate derivative[s] of a protected nucleoside[s] [are attached] thereto, and automatedly synthesizing